

# *Instruction Manual*

# SUB FOCUS

Powered Subwoofer

**ace-bass**  
T E C H N O L O G Y

World patents:  
Australia 508491  
Great Britain 1565858  
Canada 1083490  
Sweden 7603585.6  
USA 4.118.600

 **audio pro**

Audio Pro AB.

Box 1015. SE-251 10 HELSINGBORG SWEDEN

[www.audiopro.com](http://www.audiopro.com)

## IMPORTANT SAFETY INSTRUCTIONS

**1) Read instructions** - All safety and operating instructions should be read before the product is operated.

**2) Retain Instructions** - The safety and operating instructions should be retained for future reference.

**3) Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.

**4) Follow Instructions** - All operating and use instructions should be followed.

**5) Cleaning** - unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with dry cloth.

Exception: A product that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorizing code for a CATV Converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the product in the cleaning description otherwise required in number 5.

**6) Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**7) Water and Moisture** - Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub; in a wet basement or near a swimming pool; and the like.

**8) Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.



**9) A product and cart combination should be moved with care.** Quick stop, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

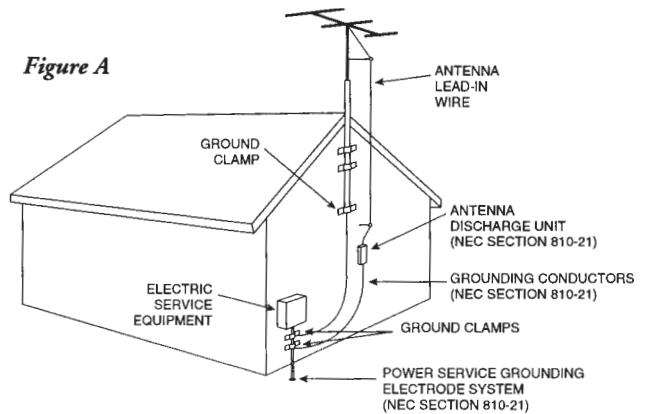
**10) Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. Placing the product on a bed, sofa, rug, or other similar surface should never block the openings. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

**11) Power Sources** - This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

**12) Grounding or Polarization** - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety of the polarized plug.

**13) Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**14) Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size for grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.



**15) Lightning** - For added protection for this product during a lightning storm, or when it is left unattended for a long period of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

**16) Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

**17) Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles at this can result in risk of fire or electric shock.

**18) Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

**19) Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified service personnel.

**20) Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those control that are covered by the operating instructions as an improper adjustments of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

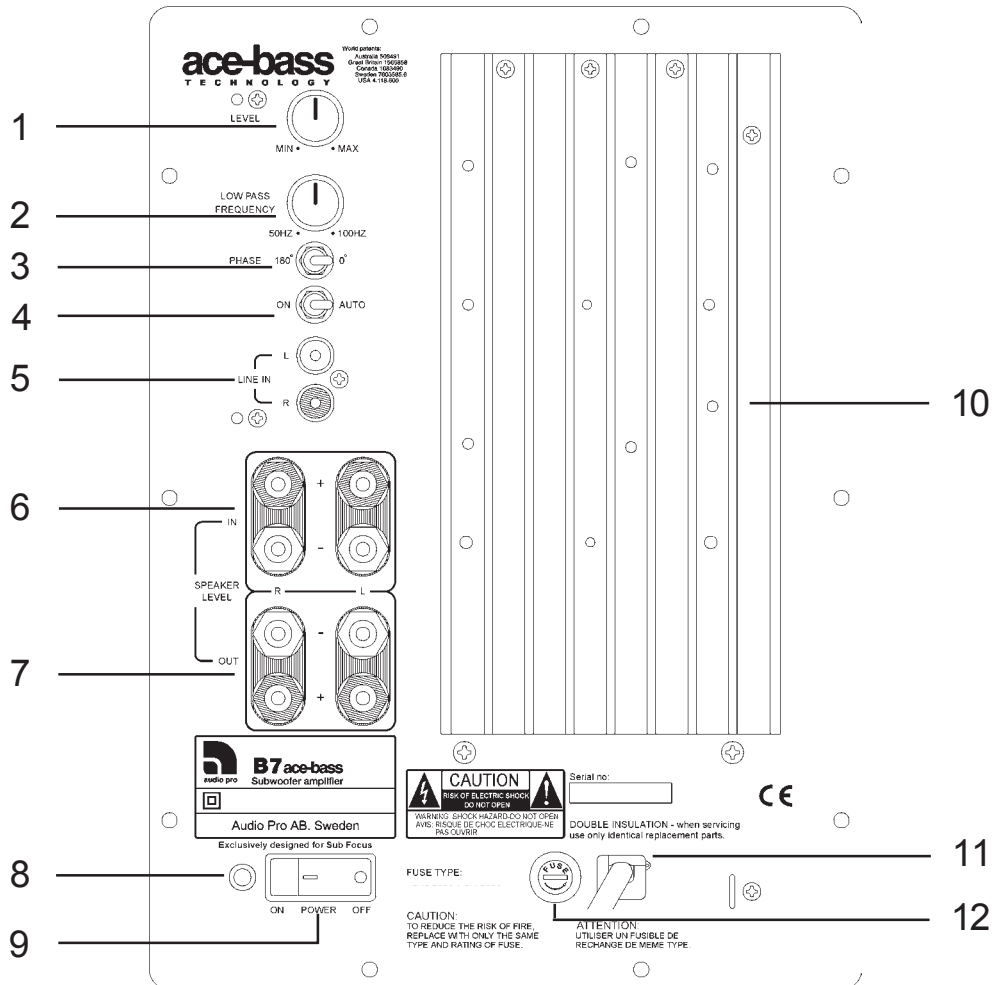
**21) Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by manufacturer or that have the same characteristics as the original part. Unauthorized substitutes may result in fire, electric shock, or other hazards.

**22) Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**23) Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

**24) Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

# CONTROLS AND INDICATORS



- |                               |   |                       |
|-------------------------------|---|-----------------------|
| 1) Volume control             | 5) Line input from amplifier (mono)     | 10) Heat zink         |
| 2) Low pass crossover control | 6) Speaker level input (from amplifier) | 11) Mains Cord (115V) |
| 3) 0°- 180° phase adjustment  | 7) Speaker level output (to satellites) | 12) Fuse ( T4AL )     |
| 4) Standby mode switch        | 8) Main power ON indicator (red)        |                       |
|                               | 9) Main power switch (ON-OFF)           |                       |



**WARNING !**  
To reduce the risk of electric shock, do not open or remove cover or back. Do not expose this appliance to rain or moisture. In case of malfunction consult qualified service personnel.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point, within an equilateral triangle, is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**Congratulations to your choice of Audio Pro SUB FOCUS subwoofer and to a new sound experience.**

**Audio Pro SUB FOCUS** is a unique product built with advanced technique. It is very easy to handle and install. **SUB FOCUS** is equipped with the unique Audio Pro **ace-bass** technique, in combination with the built-in 400 watts amplifier, the 10" long throw woofer and the extremely solid cabinet offers a natural and deep bass reproduction at sound levels you never thought existed.

The **Audio Pro SUB FOCUS** offers extraordinary performance and lots of possibilities. In order to get the most out of your new subwoofer, we recommend you to spend time and carefully read these instructions before you connect and start up your system.

### **What is ace-bass ?**

Normally, speaker design is bound to follow the laws of physics. The consequence will be, to get deep bass, the speakerbox must be very large. With the ace-bass technique we can "change" the laws of physics in the way that the driver believes it is placed in a much larger speaker box.

Furthermore, the ace-bass technology improves the driver performance. With the ace-bass technique, we can design smaller subwoofers with deeper and cleaner bass.

## **1. UNPACKING**

Carefully unpack the Audio Pro **SUB FOCUS** and check for any damages. If possible, keep the cartonbox if future transportation is needed. Locate the enclosed RCA cord and Y-adaptor.

You should immediately contact your dealer if the **subwoofer** is damaged .

## **2. INSTALLATION**

There are different methods to connect your **subwoofer** to a HiFi / Home Theater system. In the following text we explain 2 different ways. **NOTE! Do not connect the mains cord until all other installation is completed.**

### **2.1 To an amplifier / pre-amplifier with Subwoofer pre-out terminal.**

Connect the enclosed RCA cord from your amplifiers subwoofer-out terminal to LINE IN on the subwoofer. Use the enclosed Y-adaptor to divide the signal to both inputs.

The audio signal is passing through the cords from the subwoofer-out terminal to the built-in amplifier. By using the LOWPASS control, the upper frequency of the subwoofer can be variably selected from 50Hz - 100 Hz.

Note:

Connect the satellite speakers to the amplifiers speaker terminals.

### **2.2 To Speakers output terminal (High level)**

Connect speaker wires from the speaker terminals of your amplifier to the SPEAKER LEVEL IN of the subwoofer. Carefully check the polarity of the wires (+ to + and - to -). Connect both Left and Right channels. The satellite speakers are connected to SPEAKER OUT on the subwoofer. Again, carefully check the polarity (+ to + etc).

In this installation, the satellite speakers HIPASS cross-over frequency is automatically set to 100 Hz. If you want the speakers to perform full frequency range, connect them to the normal amplifiers Speaker Output.

# 3. FUNCTIONS

## Main Power switch (9):

To switch the subwoofer amplifier to ON or OFF mode. Make sure it is turned **OFF** during installation.

## Standby modes (4):

In Power ON mode, **SUB FOCUS** is equipped with an auto Standby mode circuit. Set to ON, the subwoofer is constantly ON. In Auto mode the subwoofer will switch to standby approximately 20 minutes after input signal ceased. It will start automatically when signal is received. Turn OFF the Main power switch if the subwoofer will not be used for a longer period of time.

## Power indicator on amplifier (8):

The rear indicator shows the operation status of the subwoofer amplifier as follows:

Light off:OFF      Red:Main power ON

## Power indicator on the front panel:

The front panel indicator shows the operation status of the subwoofer amplifier as follows:

Light off:Standby    Blue:ON

## Volume control (1):

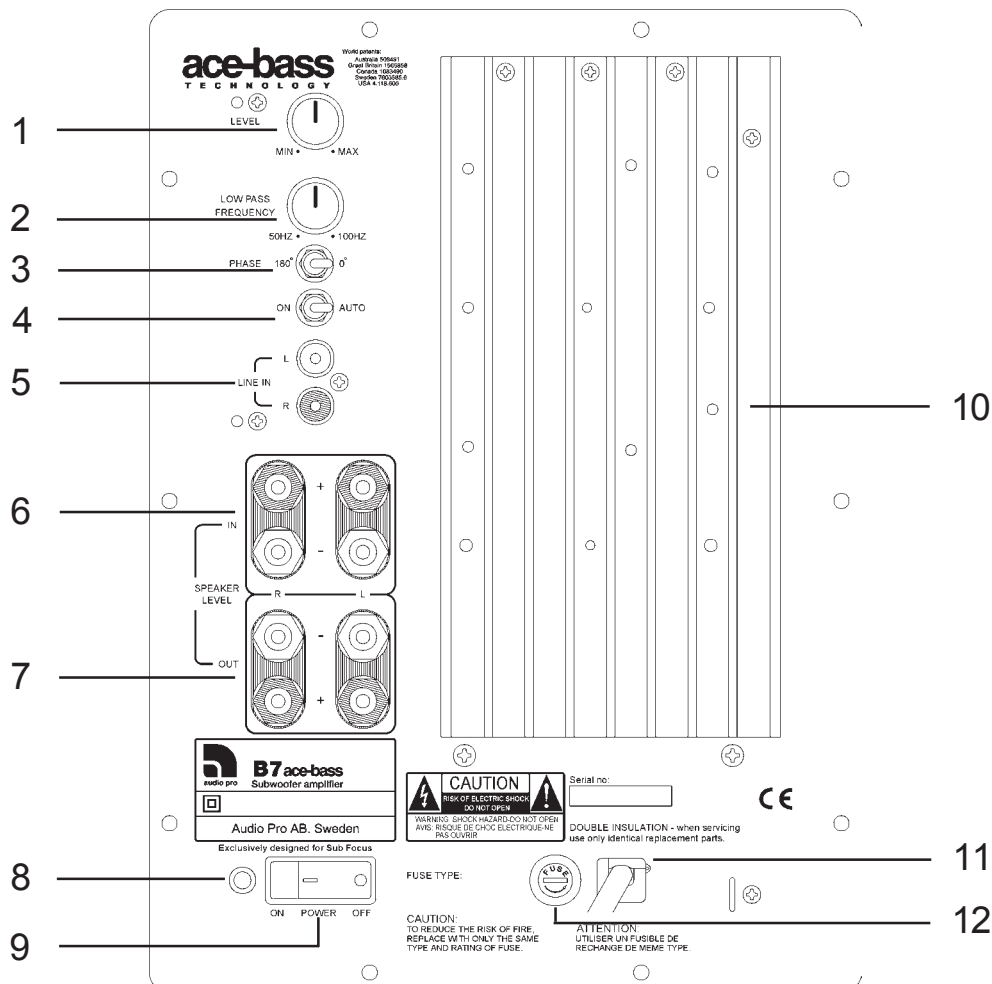
The sound level of the subwoofer can be adjusted. Use the volume control carefully, remember that program material may contain very high energy.

## LowPass (2):

The Lowpass crossover frequency can be adjusted variably between 50 and 100Hz. This gives a unique possibility to perfectly match the Subwoofer to your satellite speakers. The lowest frequencies will be reproduced only by the subwoofer.

## Phase adjustment (3):

The placement of the subwoofer can have effect on the phase between subwoofer and satellites. With the phase adjustment the phase can be switched 180 degrees.



## 4. PLACEMENT

Your Audio Pro subwoofer is designed to produce music information in the frequency range below 100 Hz. The human ear is being deprived the ability to locate direction of sound for these low frequencies, why the placement of the subwoofer is not critical. Audio Pro subwoofers very steep lowpass filters make the placement easier to fit into your listening room. However you can use the nature of the acoustic laws in the following ways:

1. To get the most amplification of the room itself, place the subwoofer close to a corner at a distance of about 10 cm from the walls. If you get too much bass, move the subwoofer out from the corner.
2. By experimenting with the placement of the subwoofer, you can optimize the sound quality. One good rule is to place the subwoofer at the same wall as the satellite speakers.
3. Never cover the subwoofer or place it where the built-in amplifier will be covered.

## 5.

## TROUBLESHOOTING

If you should face any problem with the subwoofer function, please check following points. If the problem remains after checking these points, please contact your dealer.

1. Check that all connections have been made properly. Check if any of the cables are damaged or short-circuit.
2. Audio Pro SUB FOCUS has a sophisticated overload protection. This protects your subwoofer from damages caused by too high volume setting. SUB FOCUS is also equipped with an over-heat protection.

## 6. TECHNICAL SPECIFICATIONS

Amplifier:	400 Watt RMS
Woofers:	10" Long throw woofer
Frequency range:	23 - 100 Hz
HighPass filter:	100Hz, 6dB/octave (Only when using speaker level IN/OUT)
Lowpass filter:	50 - 100Hz, variable 24dB/octave
Dimensions:(WxHxD)	350 x 380* x 350 mm (* add 3,5 cm for spikes)
Weight:(net)	19 Kg

Specifications may be changes without notice, Audio Pro follows a policy of continuous advancement in development